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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,587	09/08/2003	Gregory Tran	139-028U	9899

7590 09/20/2005

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EXAMINER
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BLOUIN, MARK S

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/657,587		TRAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Mark Blouin		2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **Detailed Action**

### **EXAMINER'S AMENDMENT**

- An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

**Claim 1** is amended as follows:

“Balance head” on line 9 is changed to “balance weight”.

#### ***Election/Restrictions***

1. This application contains claims 8-28 drawn to an invention nonelected with traverse in Election/Restriction reply dated August 12, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. The elected claims are 1-7.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 6 recites the limitation "disk spacers" in line 11. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Thorson et al (USPN 5,422,776).

6. Regarding Claim 1, Thorson et al shows (Figs. 1-3) at least one mechanical counterbalance for use in balancing a disk pack that includes a spindle motor (10) rigidly coupled and aligned by at least two open screw holes (11) with a disk clamp, comprising a locking plate collection comprising a disk clamp (14) and a spindle motor a cylindrical shaft (20) rigidly coupled to a latching assembly, both centered around a primary axis, and a balance weight (31), wherein the latching assembly includes a compressible latch (35,37) rigidly coupled to a latch gap zone (33), both centered around the primary axis, wherein the balance weight is rigidly coupled to the latch gap zone, wherein the cylindrical shaft is rigidly coupled to the compressible latch, wherein for each of the open screw holes (11), when the mechanical counterbalance is inserted into the open screw hole to lock the mechanical counterbalance, the cylindrical shaft fits into the open screw hole, the compressible latch compresses while passing through the disk clamp, and the compressible latch expands after passing through the disk clamp, wherein the mechanical counterbalance has a total mass provided at essentially the primary axis when used in the disk pack.

7. Regarding Claims 2 and 3, Thorson et al shows (Figs. 1-3) a mechanical counterbalance is primarily composed of one material formed into the cylindrical shaft the latching assembly and the balance weight, wherein the material is at least one member of the collection comprising the material is essentially a plastic (nylon – Claim 9), and the material is castable.

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8. Regarding Claim 4, Thorson et al shows (Figs. 1-3) the mechanical counterbalance is free of each member of a contaminant collection comprising a particle larger than a first specification, a hanging burr larger than a second specification, and a contaminant determined by a third specification, wherein each of the first specification, the second specification, and the third specification, is derived from a reliability specification used in the manufacturing the hard disk drive.

9. Regarding Claim 5, Thorson et al shows (Figs. 1-3) the mechanical counterbalance locks against the disk clamp (Column 4, lines 18-19).

10. Regarding Claim 6, Thorson et al shows (Figs. 1-3) the locking plate collection further comprising at least one of the disk spacers (15).

11. Regarding Claim 7, Thorson et al shows (Figs. 1-3) the compressible latch includes at least one member of a latch collection comprising a compressible ridge ring, and an M compressible fin ring (35a, 35b), wherein M is at least two.

### *Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (571) 272-7583. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for regular and After Final communications.

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Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin  
Patent Examiner  
Art Unit 2653  
September 12, 2005

A. J. HEINZ  
PRIMARY EXAMINER  
GROUP ~~2500~~ A. U. 2653

